

Quick guide to cutting with Epilog Fusion Edge 36

Adrian Anderson Bergflødt

August 9, 2022

Contents

1	Before You Start	2
2	Turning on the system	2
3	Preparing Your Design	4
3.1	Flexi designer print settings	5
4	Preparing the Laser Cutter Job	5
5	Operating the laser cutter	8
5.1	Trace your part	8
6	Start your job	9
7	Jog the laser	10

1 Before You Start

Training is **MANDATORY** in order to operate this machine, for requesting training or other questions please contact Sonen or ROBIN engineering staff at robin-engineer@ifi.uio.no. Before you start, make sure that you have read and understood this for SOP and operational safety. Then make sure that the Laser cutter has been maintained.

2 Turning on the system

The system consists of the laser cutter, filter and computer.



Figure 1: Laser cutter



Figure 2: Filter

Turn on the laser cutter with the switch located on the right of the laser cutter.



Figure 3: Power switch for the laser cutter

Turn on the filter by first turning on the power to the filter. This is done with the switch at the back of the filter.



Figure 4: Power switch for the filter

Then by pressing the power button at the front of the filter.

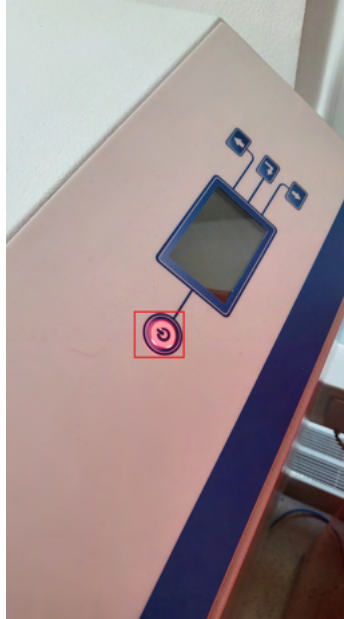


Figure 5: Filter power button

3 Preparing Your Design

Import your design into Flexi designer. Lines of width 0.0mm will be vector cut. If there are any engravings in your design, these must be rasterized. To rasterize your engraving select your engraving, and navigate to bitmap → rasterize...

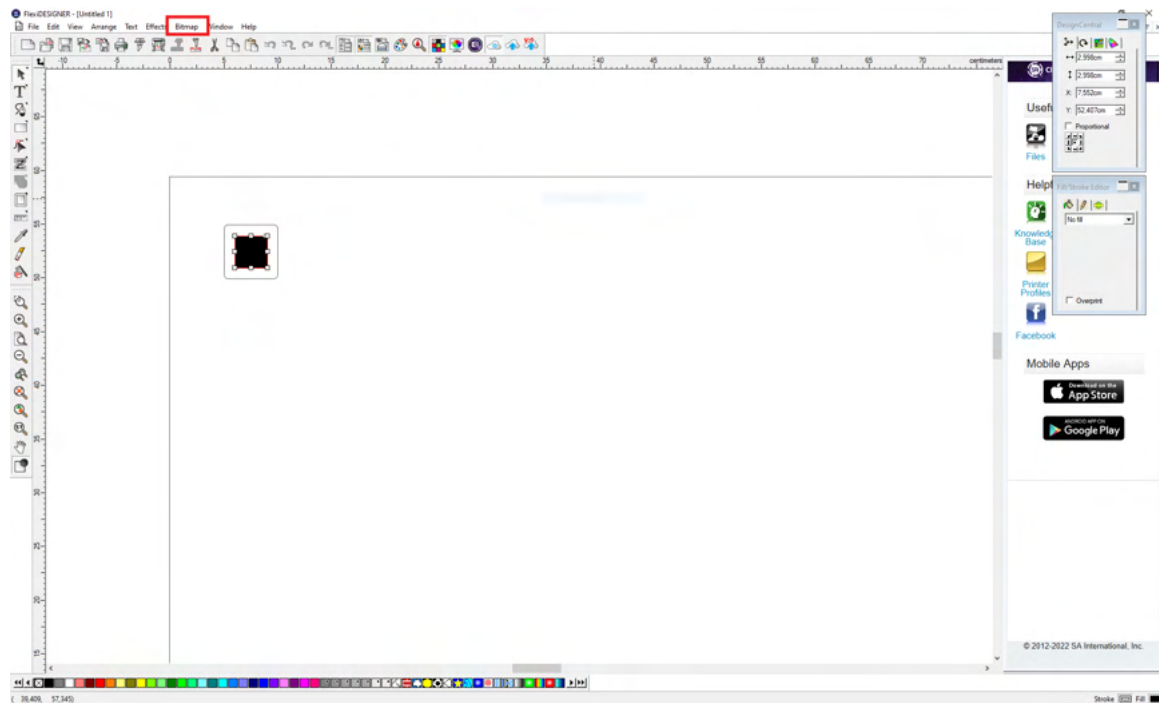


Figure 6: Select object to be rasterized

This will introduce you to the following popup.

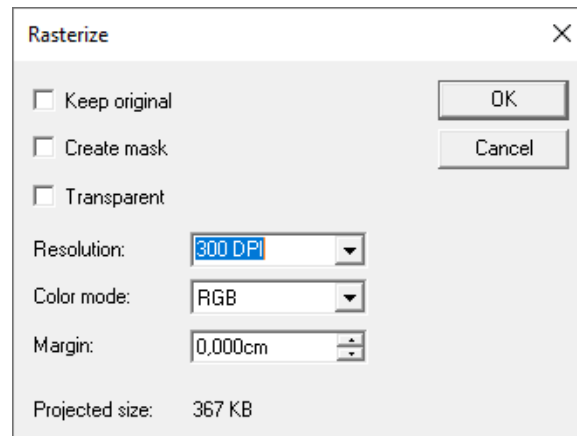


Figure 7: Rasterizing menu

Select your desired Resolution (300 dpi is generally good) and hit OK.

3.1 Flexi designer print settings

Once your design is ready hit **Ctrl + p**. This will introduce you to the print menu. The printer is called *Epilog Engraver*. Make sure that wire frame is selected as shown below.

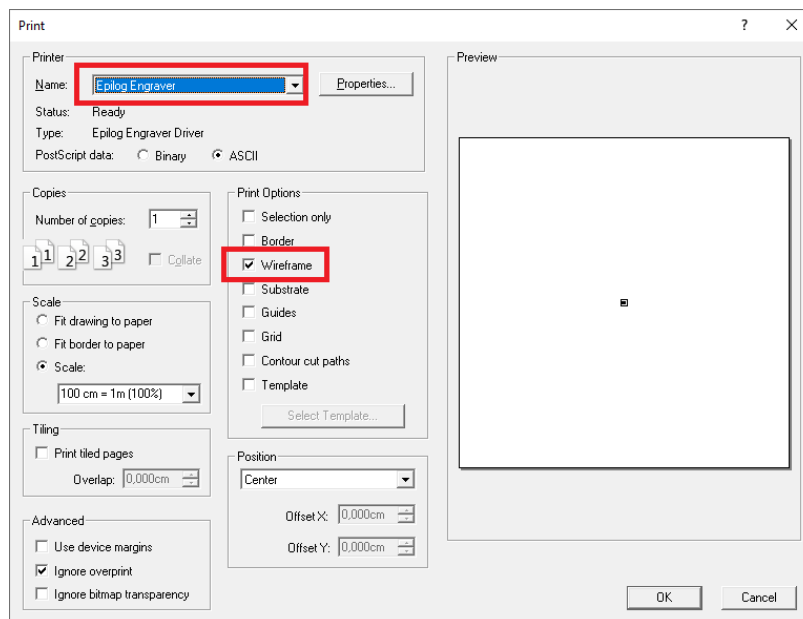


Figure 8: Flexi designer print menu

4 Preparing the Laser Cutter Job

After pressing ok in the print menu, Epilog Dashboard will open. If this is your first time using the laser cutter you may need to add the printer into Epilog Dashboard. The laser cutter is of model Fusion Edge 36 and has a 60W CO₂ laser. Its IP-address is 10.64.127.7.

You will now be shown a live feed of the cutting board of the laser cutter. To find your part click the fit button indicated below.

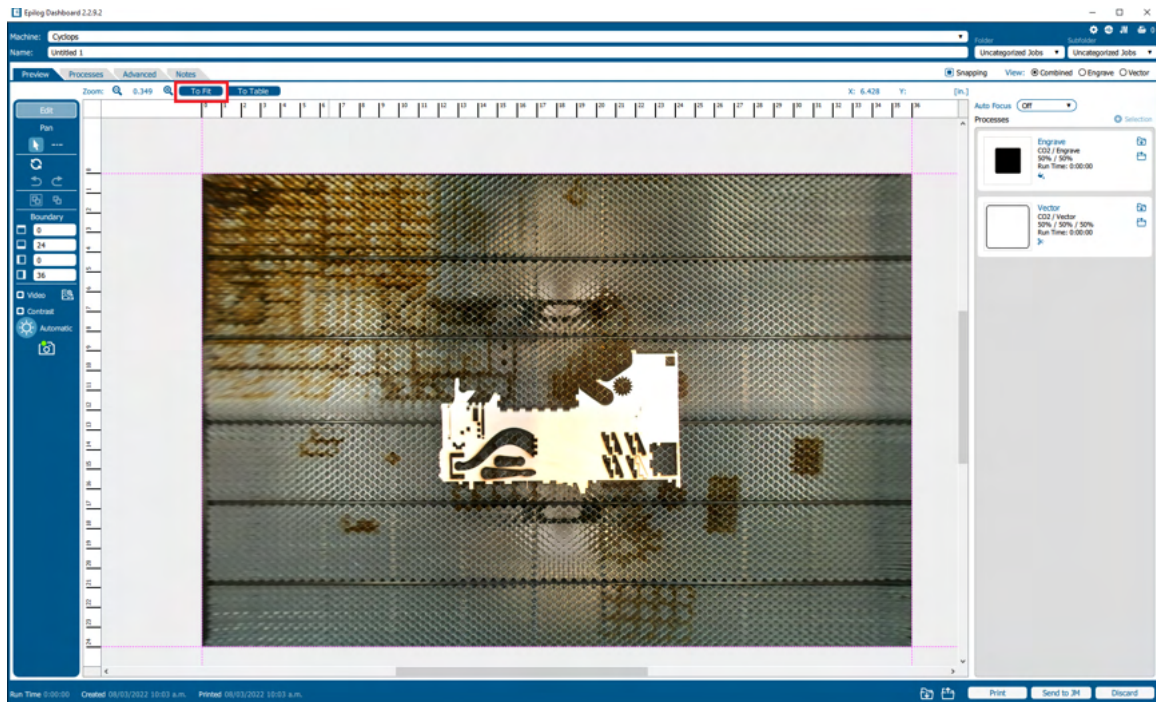


Figure 9: Find your design

Drag the image of your part onto your material. Give your project a name and activate autofocus with plunger. Import the settings for your material for both etching and cutting as shown in the images below.

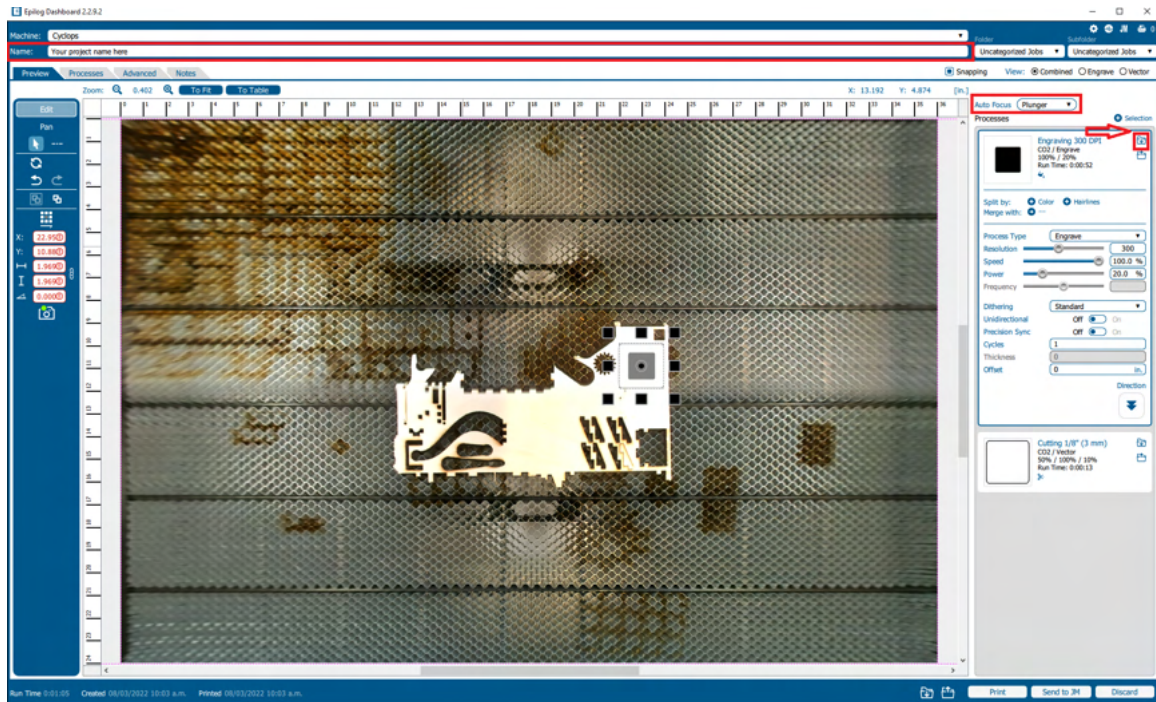


Figure 10: Name your project, import settings and set autofocus to plunger

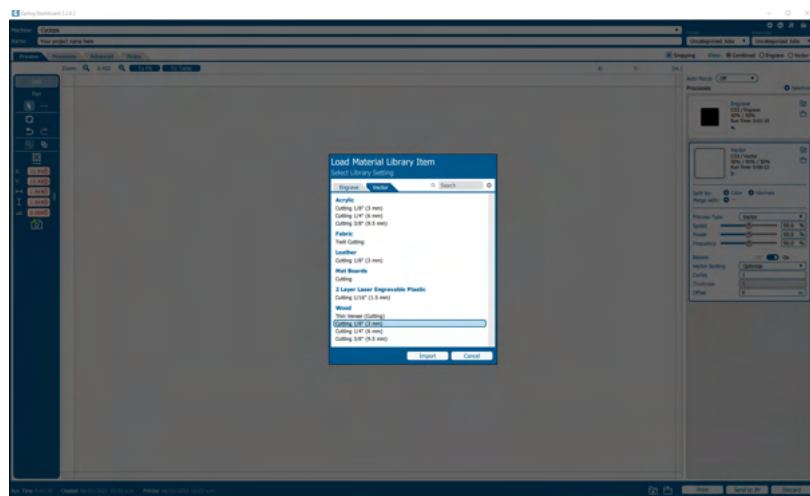


Figure 11: Import cutting settings

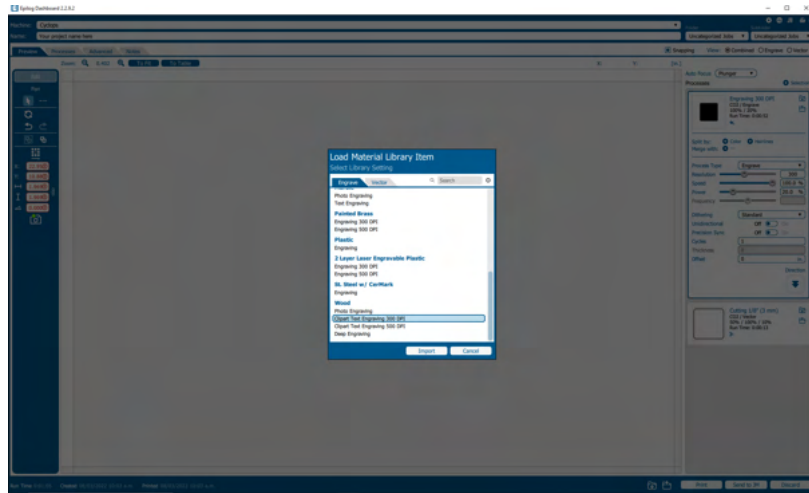


Figure 12: Import engraving settings

Once ready press print.

5 Operating the laser cutter

5.1 Trace your part

In order to ensure that the laser cutter will cut your part where you place it in Epilog dashboard, it is recommended that you trace the outline of your design. To do this activate the laser pointer, select your job from the job menu and hit the trace button as shown in the figure below.

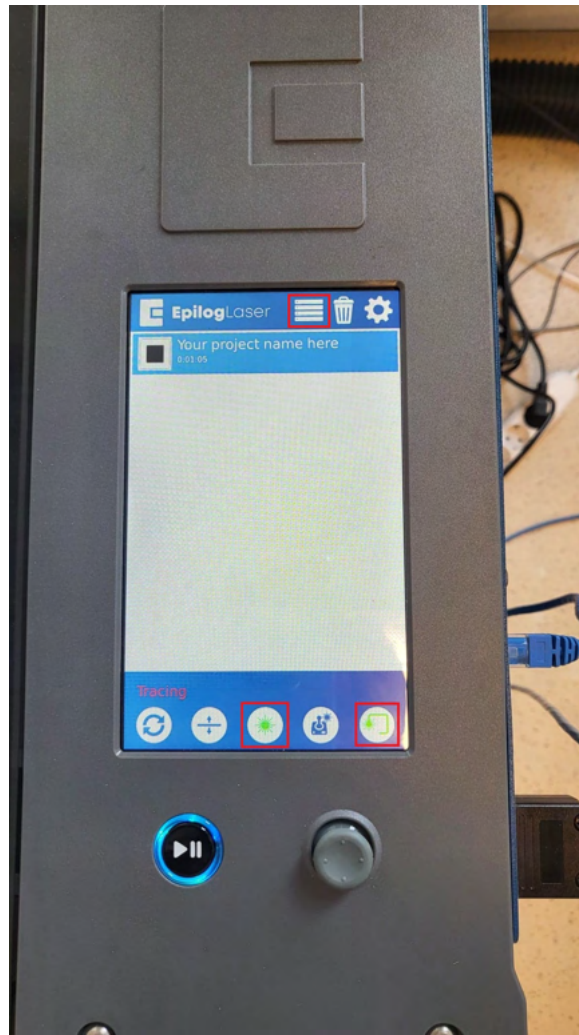


Figure 13: Trace your design

Observe that the outline is entirely on the material you intend to cut before proceeding.

6 Start your job

To start your job, select your job from the job menu and hit the play button as indicated below.

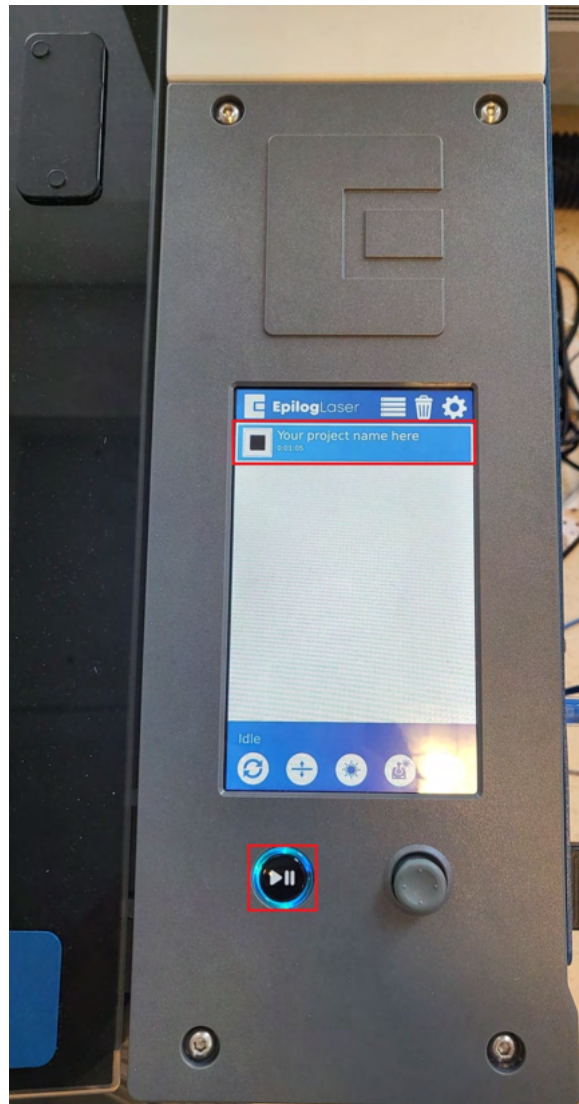


Figure 14: Starting your job

7 Jog the laser

To jog the laser select the jog button. You may now jog the laser cutter with the joystick.

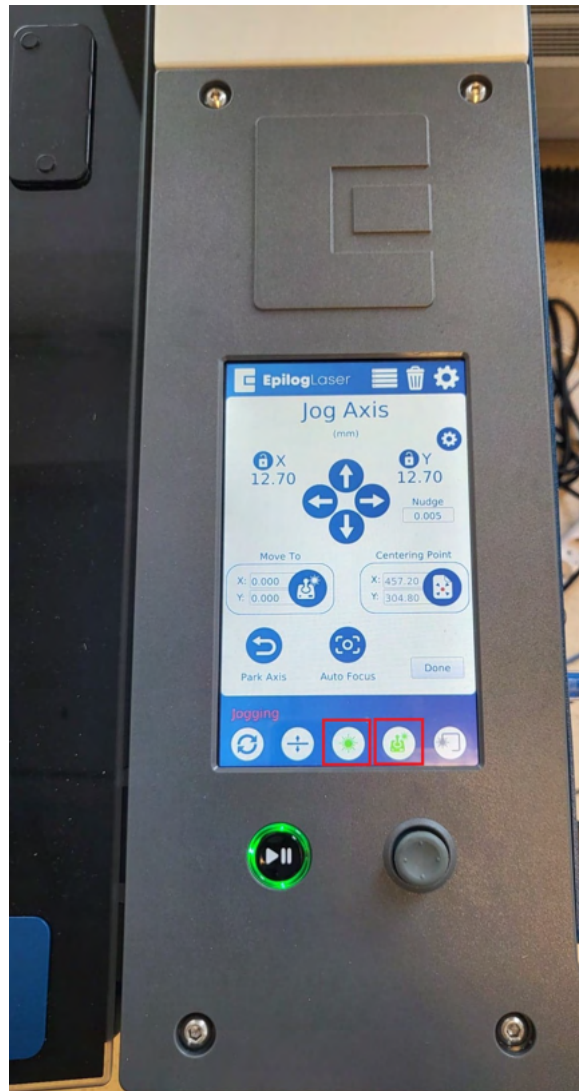


Figure 15: Jogging the laser cutter

To park the laser hit the button with the two circling arrows.